THE HONORABLE JAMES L. ROBART 1 2 3 4 5 6 UNITED STATES DISTRICT COURT WESTERN DISTRICT OF WASHINGTON 7 AT SEATTLE 8 UNITED STATES OF AMERICA, 9 Case No. 2:12-cv-01282-JLR Plaintiff. 10 **DECLARATION OF BRIAN MAXEY IN SUPPORT OF** v. 11 **CITY'S NOVEMBER 2022 QUARTERLY** CITY OF SEATTLE, REPORT 12 Defendant. 13 14 I, Brian G. Maxey, being familiar with the facts set forth herein based on my personal 15 knowledge, and being competent to testify, hereby declare under penalty of perjury that the 16 following is true and correct: 17 1. I serve as the Chief Operating Officer of the Seattle Police Department and have held this 18 position from 2015-2018 (under Chief Kathleen O'Toole) and resumed this position in 2022 19 under Chief Adrian Diaz. Between 2018 and 2021 I served on federal monitoring teams in 20 Baltimore and Cleveland, helping to guide those departments on use of force, stops and 21 detentions, and internal affairs, as well as working on developing modern technological 22 systems of record and supporting data analytics. I also worked with numerous jurisdictions in 23 a consulting capacity, including Minneapolis, Oklahoma City, Tacoma, Milwaukee, and the

Port of Seattle, to modernize their public safety services. After returning to the Seattle Police Department in 2022, I have been privileged to participate in presenting SPD's developments in data analytics and evidence-based management at Harvard University, the Texas A&M University Consent Decree Conference, and in various additional forums. In doing so, however, I am quick to note – and in this context, I do so here as well – SPD's accomplishments in this area are due to the extraordinary and dedicated work of SPD's Performance Analytics and Research Team, who have worked tirelessly over the past seven years to position SPD solidly on the leading edge of evidence-based, peer-reviewed practice and vision in the area of public safety reform.¹

- 2. The Data Analytics Platform is a robust analytics platform developed as part of the Consent Decree to ensure the enhanced reporting and analytic capabilities required to demonstrate full and effective compliance as well as sustained compliance with the decree. Moreover, in 2022, SPD has been expanding the application of the DAP well beyond the requirements of the Consent Decree to many additional areas of officer activities in order to offer evidence-based foundations for policy decisions. As one of the key goals of the Consent Decree was to ingrain in SPD the commitment to becoming and remaining a learning organization, I am pleased to offer an update on some of our analytics work to the Court.
- 3. **Risk Managed Demand**. In the last quarter, SPD completed Phase 1 of Risk-Management Demand (RMD)—a project to develop a risk management model to triage and right size the response to calls for service (*i.e.*, 911 calls and requests that come through SPD's online

¹ In particular, SPD is enormously proud of and grateful for the work of Senior Research Scientist Loren Atherley, who was recently inducted into the Evidence Based Policing Hall of Fame at the George Mason University for Evidence-Based Crime Policy, in large part due to his work with the Data Analytics Platform and with the Consent Decree.

reporting system). SPD is operationalizing a differential police response, studied initially in the 1980s but never realized given limitations of the data and technology, at the time. The department is studying which call types currently responded to by officers can be handled by alternative or co-responders, developing a more appropriate, satisfying and ultimately safer response ecosystem. Most importantly, this effort is scalable, constructed on open-source resources and will be shared with the industry, free of charge. The SPD is an active participant in the Transform911 project hosted out of the University of Chicago.

- 4. The RMD work is the result of initial efforts undertaken in cooperation with the National Institute for Criminal Justice Reform (NICJR). The resulting follow-on, multiphasic project has produced a framework for strategic planning of differential police response (Phase 1 Complete) and a system for call triage based on the information provided by the person who is requesting service. In other words, while no model can predict what type of response will be needed or whether anyone will be harmed as a result of a given 911 call, the model can estimate the level of risk presented by certain types of calls. As part of Phase 1, SPD analyzed nearly 2 million records of police responses between 2017 and 2022. Phase 2, schedule to be complete in Q1 of 2023, will build a natural language processing call triage solution to operationalize the conceptual framework developed in Phase 1. Additional details about RMD are attached as Exhibit D.
- 5. Implementation of a differential police response continues the recommendations of the NICJR for a tiered response model. The Phase 1 risk management framework leverages objective criteria based on the likelihood of a severe outcome (death, serious injury, injury requiring treatment or other harm) is used to classify more than 350 call types currently in operation, into four response tiers. The four tiers of response are designed to provide the right size

6

7

12

17

19

response (e.g., a mental health provider), while mitigating the risk to bystanders, the subject and responders. In some cases, the risk model identifies calls that can be deferred from an inperson patrol response, drawing critical resource in a time of scarcity, to online reporting, walkup counter reporting, or scheduled appointments direct to a detective. The model additionally recognizes that police may theoretically escalate an otherwise low risk response. These Tier 3 responses dispatch non-police responders directly, with police in close attendance (not necessarily physically present), able to rapidly intervene.

- Most importantly, the RMD model learns. A differential police response or alternative to police, has never been attempted at scale. As a result, the RMD model is based on an allhazards responder model common to nearly all police services in the United States. The analysis is currently based on a proxy measure of risk. As the City of Seattle deploys a differential response, the RMD framework will respond with an updated risk profile and response tier forecast. In this way, as a more direct measure of risk becomes available from the data, the response ecosystem can respond to dial in the response.
- 7. SPD has contracted a vendor (SOW 10) and identified a solution based in established technology for natural language processing, to operationalize this approach. The Community Safety and Communications Center (CSCC) handles more than 900,000 calls per year, and approximately 80% of the 911 calls last year were for non-criminal events; as a result, an important goal is to spend more resources on emergencies and fewer resources on low-risk calls. In addition, SPD and CSCC hope to implement a more advanced online reporting system that can reach a wider group of people. They are evaluating a system that can provide language translation services, be accessible to people with disabilities, and also increase the ability to

assist people with limited access to technology. A slide presentation on this option is attached as Exhibit E.

- 8. In sum, the RMD project measures predictable risk to any responder for a given call and will provide dispatchers with real-time decision support as to what the probable risk is for the call at hand. As far as we are aware, this has not been done before in any City.
- 9. Early Intervention System. Over the past several years, SPD has been partnering with researchers from the Washington State University College of Nursing, the National Network for Safe Communities at John Jay College of Criminal Justice, and our vendor-partners, The Dock, to develop a next-generation EIS. A 2017 study of the existing system found it biased toward women and highly productive officers, without being particularly sensitive in prediction officer misconduct. Further, the state of a priori knowledge of the predictors of adverse events is insufficient to precisely target the root cause in a truly preventative model of early intervention.
- 10. The next-gen EIS in development is designed to enhance supervision and supervisory accountability, under an intelligent decision support model. The focus of this system is to render highly precise forecasts of adverse events (such as sustained complaints), combined with guidance on how to support the employee, through mentoring, wellness, or other non-punitive resilience-based interventions, in such a way as to break future forecasts. In simple terms, this means that resolution of a concerning trend is not dependent on the application of some form of supervisor counseling (*i.e.*, "checking the box"), but instead on correcting the trend to a degree that the system no longer predicts an adverse event. These forecasts are rendered native to existing performance dashboards, and in a manner that reinforces accountability (management and system). The objective is to maximize true positives

indications, while minimizing "false positives." SPD is acutely aware of the importance of getting this right – a poorly conceived and implemented EIS can negatively affect morale, penalizing highly productive officers, and incentivizing employees to leave an organization they perceive not to be procedurally just – and is proud that over the past quarter, we have achieved two significant milestones in this work.

- 11. The first milestone is that SPD implemented a substantial upgrade to its data analysis software, called "DAP 2.0." Next generation EIS requires this software in order to operate. All engineering infrastructure, data sources and processes for DAP 2.0 became operational as of October 12, 2022. This achievement sets the stage for DAP 2.0 to "go live" on November 3, 2022. This upgrade to SPD's already advanced data processing capabilities will allow the next generation EIS to analyze approximately 1500 separate data points in the forecast of officer adverse events; future versions of this system will grow to include more direct measures of officer behavior, and additional adverse event types (*e.g.*, high severity complaint types, EEO complaints, loss of talent, serious use of force).
- 12. The second milestone reached is that, on October 6, 2022, SPD hosted a workshop with subject matter experts from across the country and internal stakeholders to design interventions (*i.e.*, specific action plans that supervisors can use with officers) to address behaviors potentially leading to the receipt of a sustained complaint. A follow-up workshop will be held the week of November 7th, 2022 and will focus on the development of a typology of officer failure.
- 13. The next generation EIS is on schedule to be in production and rendering predictions by the end of 2022. An evaluation of the system will be conducted in parallel with the existing, threshold-based system during the first six months of 2023, informing a decision to adopt the new system (projected Q3 2023). Ultimately, this program, when implemented, will provide

Importantly, this work is not being done in a silo; SPD will continue to submit its work around lessons learned and the science of early intervention for peer review and publication, and all coding for this system, including predictive models, is being built in open-source software and will be made public, free of charge.

- 14. **SPIDR Tech.** SPD is nearly finished implementing "SPIDR Tech" software for patrol officers. Through quick, mobile-friendly surveys, SPIDR Tech gathers near-real-time feedback on how members of the public experience their interactions with officers. In addition to collecting important feedback on professionalism and other information, the program also is expected to provide reference information and resource links more quickly to people who seek assistance. By the first quarter of 2023, SPD anticipates that it will use data generated from this program as one of its quality metrics in monthly SeaStat meetings. Additionally, features from the SPIDR Tech platform will be incorporated in the next generation EIS and will form the backbone of a proposed Immediate Intervention System (IIS), informing supervisors and officers of poorly rated interactions in near-real-time.
- 15. Another benefit to SPIDR Tech, unrelated to the requirements of the Consent Decree, is that it will provide customer service text-based updates to community members who call 911, giving them real time estimates of when an officer will respond and directing them to alternative approaches such as on-line and telephone reporting. Similarly, the system will provide text updates regarding criminal investigations, communicating what is happening in their case and importantly when it is closed or sent to the prosecutor. While SPD would love to have a more personal touch, this system will automate the customer service outreach the public expects in 2022. It is an important start.

DECLARATION OF BRIAN MAXEY - 7

16. **Health Check**. SPD also has volunteered to serve as a pilot site with Health Check, an initiative of the New York University School of Law Policing Project to implement "a comprehensive tool to define and measure the characteristics of a fair, effective, and just policing agency." As part of this pilot, a social science researcher is working with SPD to analyze approximately 100 different metrics that are intended to assess the quality of public safety services, just policing, accountability, and organizational efficiency. An informational sheet is attached as Exhibit F. The department is additionally an early adopter of the Justice Counts initiative, a joint Bureau of Justice Assistance and Council of State Governments Justice Center initiative bringing unprecedented transparency to policing. An informational sheet is attached as Exhibit G.

I declare under penalty of perjury that the foregoing is true and correct.

DATED this 1st day of November 2022 at Seattle, King County, Washington.

BRIAN MAXEY

EXHIBIT D



Risk Managed Demand:

Phase One Technical Brief

The City of Seattle is committed to providing comprehensive public safety services. In response to Statement of Legislative Intent SPD-017-A-001, the Seattle Police Department (SPD) undertook a project to develop a model to predict outcomes of Calls for Service (CfS). This report documents Phase One of the Risk Managed Demand (RMD) project. Nearly 2 million records of police response between 2017 and 2022 were considered in the construct the Phase One risk matrix. The resulting risk scores and their related response tiers were used to generate staffing estimates from three years of normal operation (pre-pandemic) response data $(2017 - 2019)^2$.

These analyses are intended to inform capacity building efforts in advance of implementation (Phase Two) of a call triage system sufficient to operationalize the response model. Notably however, and as has been presented previously, the purpose of RMD is not to identify a discrete list of call types that can be "diverted" from police. Beyond a basic list of low-level calls for which little to no risk can be assumed³, it is not possible to predict the outcome based simply on how a Call for Service is initially categorized.

Rather, this phase establishes a framework for risk management. The risk matrix (risk assessment) and reclassification (risk management) of call response tiers in support of an ideal response ecosystem (alternate/co/differential response) is the first step toward an ongoing cycle of active risk management. SPD is the first department to engage in this more sophisticated form of analysis.

Importantly, this analysis focuses on risk: except for some manual reclassifications needed where the results were incomplete, necessary overlays of legal requirements (e.g., mandatory arrest DV), practical considerations (such as how many resources the City might want to divert to marine responders), and labor obligations are not included. This matrix provides the context to explore what is possible.

Overview:

RMD is the natural evolution of the effort, in collaboration National Institute for Criminal Justice Reform (NICJR), to identify calls which can be safely handled by a police alternative. Since the early 20th century, American police operations have been driven by a need to respond to CfS. In the latter half of that century, a series of efforts to reform the Social Welfare State (SWS) (*e.g.*, deinstitutionalization of mental health), resulted in a dramatic expansion of the types of emergency requests made of municipal governments.

¹ Pre-pandemic response data was used to generate workload estimates on the assumption the response environment will return to baseline levels. Shifts in the use of public spaces and the effects of staffing on response capacity limit the utility of pandemic and post pandemic data for modeling.

² This was the same period assessed in the NICJR analysis.

³ For example, Denver STAR responds to assist, intoxicated person, suicidal series (without weapon or self-harm), welfare check, indecent exposure, trespass unwanted person and syringe disposal.

Given the risks inherent in these requests, municipalities have elected to deploy police as all hazards responders, accepting the risk to responders and collateral harms resulting from an imperfect response. Although death and serious injury are relatively rare, the high profile and catastrophic nature of these outcomes has caused a broad reexamination of response to CfS, particularly in the wake of the murder of George Floyd. RMD seeks to establish an objective, transparent, and reliable framework for risk management, as well as a technical process for call triage—right sizing the response.

Since the NICJR report was produced, pursuant to Executive Order 2020-10, the SPD has 1) designed the RMD method, 4 2) contracted a technical and consulting services vendor⁵ to implement the call triage system (\$750,000), 3) coordinated with partners (SFD⁶, ITD⁷) to develop prototype data in an appropriately regulated environment, ⁸ 4) in coordination with Community Safety Communication Center (CSCC), identified a vendor who can support the development and operation of a call triage system sufficient to support the RMD tiered response model, and 5) generated staffing estimates (presented here for the purposes of informing capacity building).

In the coming months, the SPD will work with its partners to develop a first of its kind Natural Language Processing (NLP)-based call triage system. This Phase Two work will provide additional information that call takers at CSCC will use to right-size the response. While RMD will provide guidance, it WILL NOT override the human decision-making necessary to protect life and safety. The statistical models developed under RMD will be made available, publicly, as open-source coding for transparency and critical review. The collaborative work to develop and operationalize the technology represents a giant leap forward for the industry, meeting a critical gap in call triage identified by the Transform 911 project as a barrier to alternate response.

Data:

The data underlying RMD was developed by relating nearly 2 million police calls to approximately 350,000 records of aid response by the SFD to generate a severity score. 9 Of note, the systems used to track police and fire responses do not relate to each other. When police require a fire response, a call must be made to the fire alarm center, and vice versa.

No native relationship between calls exists. To relate these calls, the SPD designed a novel process to identify responses occurring at the same place (within 200 ft) for overlapping periods of time (1/10th

upon request.

⁴ The NICJR analysis is based on a plan language reading of the description of the final call type of the call and does not accurate reflect the multidimensionality or risk of the event. On the advice of noted policing expert Dr. Geoffrey Alpert, the SPD designed the RMD based on objective criteria for severity and likelihood. Dr. Alpert's opinion was presented to City Council along with the NICJR report and is available

⁵ Accenture was contracted under Scope of Work 10. Work began in July 2022 and is schedule to conclude in February 2023.

⁶ Seattle Fire Department

⁷ Information Technology Department

⁸ The RMD data requires calculating a "severity score" based on the existence and type of aid response by the SFD. This score must be calculated in a secure and compartmentalized environment. ITD acts as an authorized third-party to calculate the score. SPD personnel do not have access to identified SFD aid response records. An MOU memorializing and authorizing this work, approved by all parties involved, is available upon request.

⁹ Responses to events resulting a documented Use of Force were removed from the analysis and do not factor in the likelihood calculation. Severity scores are generated independent of the police response. Injuries documented in an aid run are not the result of the police response.

of an hour increments). From this relationship, the names of the people involved are matched using a probabilistic technique referred to as *fuzzy match*.

No known sources documenting the number of police responses involving a fire or aid response exists. To evaluate the performance of the matching technique, verifiable, high severity (death) outcomes were compared across systems. Independent analysis of the outcomes across both systems indicated an 85% match rate. Further examination of the nature of failed matches indicated not all these outcomes will be represented across both systems. Police and fire are not always required to respond to each death.

Estimates based on observation of failed match conditions suggest a match rate greater than 90% and were deemed sufficient to pass testing from the prototype phase. The computer code developed to produce this match will also be shared publicly, so that other jurisdictions might replicate this work. In total, 165,917 aid response records were related to the 1,991,498 police responses evaluated over the 5 1/3-year study period (2017 to May 2022).

RECOMMENDATION: Fully integrated (technical) police and fire call management systems (e.g., Computer Aided Dispatch) would eliminate the need for this imperfect process and further improve the accuracy of call triage.

Risk Management:

Few enterprises exist without risk. Responsible management often comes down to a process of identifying, mitigating, and accepting those risks necessary to complete the mission of the organization. Beginning in 2006, for example, the International Civil Aviation Organization required most commercial operators to implement a Safety Management System (SMS), of which risk assessment/management is a critical function. Like commercial aviation, policing has a very low tolerance for failure. The death or injury of a community member or responder represents a significant event for the organization, much like a plane crash.

By evaluating the history of the organization, against some objective criteria, a confluence of severity and likelihood can help guide the organization to make risk management decisions. As proposed in the NICJR analysis, a dimensional scaling of the more than 300 call types currently in use can provide response protocol guidelines, informed by risk management (see Table 1, below). Based on whether the risk, whatever that may be, is acceptable to the organization, policy prescribes a course of action. Table 1 (below) demonstrates risk management policy, operationalized by a risk matrix. For events coded high risk by the organization, policy defines the risk to another than all hazards responder to be "unacceptable" and so a police response is necessary. Risk classified as Tier 2 or Tier 3 indicates the risk is acceptable, with mitigation. Tier 4 responses pose no particular risk to responders or those involved. This area is safe for a deferred or alternative response (see Differential Police Response, below).

_

¹⁰ Although the literature is insufficient, it is reasonable to assume that in some circumstances the presence of police may represent a risk of escalation. For this reason, alternative response such as STAR and CAHOOTS are believed to be effective risk mitigation. Under the tiered response model, STAR and CAHOOTS type resources would full under Tier 3. In these instances, the response ecosystem (e.g., police and fire) would be aware an alternate response was in progress (coordinated via a Common Operating Picture such as Computer Aided Dispatch) and may stage nearby, able to rapidly intervene, but would not be in attendance. Both CAHOOTS and STAR also utilize Tier 2 co-response options.

Case 2:12-cv-01282-JLR Document 722-2 Filed 11/01/22 Page 13 of 33

TIER	DESCRIPTION	POLICY
TIER 1	Police Response	High Risk – Police Response
TIER 2	Co-Responder Assisted Police Response	Medium High – Must Mitigate
TIER 3	Police Assisted Co-Response	Medium – Should Mitigate
TIER 4	Deferred Response	Low Medium / Low – No Mitigation

Table 1 – Tiered Response Model

For this project, the definition of severity is fixed and determined by objective criteria (see Table 2, below). The plain language reading of the CAD event type, used in the NICJR analysis, is limited by both the third-party rater, who may not be familiar with the use of the code, and the unverified nature of the coded outcomes (CAD final call types do not reflect the presence of a corroborating record, e.g., arrest report). The severity coding employed by RMD is dependent on an objective and verified record, outside the police data system.

SEVERITY	DESCRIPTION
SEVERITY 5	An event with an associated, unnatural, death.
SEVERITY 4	An event with an associated injury requiring the ALS ¹¹ (<i>i.e.</i> , paramedic) standard of care and transfer to a medical professional.
SEVERITY 3	An event with an associated injury requiring the BLS ¹² (<i>i.e.</i> , EMT) standard of care and transfer to a medical professional.
SEVERITY 2	An event with an associated injury requiring care but no transfer of the patient to another medical professional (<i>e.g.</i> , first aid).
SEVERITY 1	No physical injury to a person.

Table 2 – Severity

All severity coding is based on the fact of a fire aid response at a particular level (e.g., ALS, BLS, etc.) and does not include injuries that are the result of the response. For the purposes of this analysis, all CAD events related to a police Use of Force (UoF) or where a police officer was reported as the injured party are not considered by the analysis. The severity coding here is not a perfect representation of what might happen absent a police response but is an acceptable proxy for the seriousness of the event.

While society is currently contemplating low-level enforcement as a strategy for social control (e.g., misdemeanors and infractions), there is little disagreement that government has an imperative to act in defense of life and safety. ¹³ For this reason, any CAD events related to a NIBRS reportable "crime"

¹¹ Advanced Life Support

¹² Basic Life Support

¹³ While an imperative to respond to reported crime and active threats to life/health/safety is critical to trust and legitimacy, many differential police or alternative responses have been proposed. This framework allows for a risk managed approach to implementation of differential/alternative response. https://www.transform911.org/blueprint/chapter-7-response/

<u>against person</u>" offense are likewise removed from the analysis. Response data for the same three-year period used by NICJR was used in this analysis. In total, 727,423 dispatched responses were considered for the years 2017 - 2019.

Calculating likelihood is less defined. Several complex statistical techniques might serve to reflect natural relationships in the data; however, they are likely to be overly complex, and challenge the transparency of the RMD program. For each final call type, the rate at which the most severe outcome occurred was calculated and expressed as a percentage. Likelihood is coded from Very Unlikely (1) to Very Likely (5) on a five-point scale (see Table 3, below).

LIKELIHOOD	DESCRIPTION
VERY UNLIKELY	Occurring less than or equal to 1% of the time.
UNLIKELY	Occurring less than or equal to 5% of the time.
POSSIBLE	Occurring less than or equal to 10% of the time.
LIKELY	Occurring less than or equal to 25% of the time.
VERY LIKELY	Occurring greater than or equal to 50% of the time.

Table 3 – Likelihood

Table 4 (below) reflects the RMD risk matrix in its pure analytical form. In this *risk assessment* each combination of severity and likelihood classifies the call types according to the tiered call response model (above). The number of call types classified is summed in each cell (e.g., Severity 5 and Very Unlikely = 68). Clusters of cells are color coded to define the response tier.

	Sev 1	Sev 2	Sev 3	Sev 4	Sev 5
Very Likely	114	0	2	1	0
Likely	0	0	1	1	3
Possible	0	0	5	4	1
Unlikely	0	0	14	2	0
Very Unlikely	0	2	51	87	68

Table 1 − RMD Risk Matrix v1 ¹⁴¹⁵

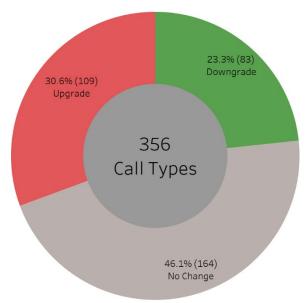
14

¹⁴ Color-coding of the risk matrix includes four major categories of response. Within the fourth classification (Tier 4 – green), a subclass of risk can be accommodated by incorporating a distinction between <u>high and low</u> harm offenses.

¹⁵ This matrix reflects the original response tier coding, without recode (see below). Counts per cell are distinct call types.

Recoding:

Risk management is based on the initial risk assessment. In this operation, the original risk assessment is managed to produce an ideal form. In commercial applications, risk management is used to mitigate



unacceptable risks blocking actions or behaviors necessary to the business. In service applications the ideal form is risk managed. Where the service prefers a more appropriate service provider but cannot accept the unmitigated risk to that provider, a mitigation is necessary to achieve that end state. For example, where a Mental Health Professional (MHP) is the ideal responder (e.g., crisis events), risk to the responder can be mitigated by a co-response. Under this risk managed response, a resource capable of intervening to protect life might be assessed as a reasonable mitigation, sufficient to render a lower risk classification.

The Blueprint proposed by the Transform 911 project outlines a "significant investment in a diverse ecosystem of response options so that callers can be

met with the right response at the right time." The initial risk assessment (see Table 4, above), represents the demonstrated risk in a police only response ecosystem. The act of risk managing an alternative or co-response examines the assessed risk against a reassessed state given a reasonable mitigation (e.g., co-responder assisted police response). The recoded response tier represents this mitigated state.

Of the 356 call types evaluated, approximately 54% were recoded because the analysis did not necessarily reflect the desired or ideal state (mitigated). Of the 54% that were recoded, 23% were downgraded to a lower response tier. A reading of the call type suggested the subject or type of service may benefit from a right sized response. In nearly 31% of call types, the response tier was upgraded because they were either a specific request for a police response (e.g., "SFD – ASSIST ON BLS FIRE OR MEDICAL RESPONSE" Tier 1) or were a call type requiring enforcement action, up to and including arrest, to resolve (e.g., "LIQUOR VIOLATIONS – MINOR" Tier 2).

In some cases, not enough observations were present in the data to render a reasonable assessment of likelihood. This is known as "out of sample" and is a common limitation cited as a root cause underlying why some predictions fail. 16 For this reason, call types with only one or no maximumseverity outcome during the study period were evaluated manually.¹⁷ Where the call type was an obvious police matter (a specific call for a police officer or unique police asset), the response tier was recoded. After this initial manual adjustment, the remaining call types were reviewed and where the response could conceivably benefit from a co-responder present (e.g., taking a report of a completed

¹⁶ Silver, N. (2012). The signal and the noise: Why so many predictions fail-but some don't. Penguin.

¹⁷ The washing out effect observed here is a limitation of the over-granulation of call types which has occurred, organically, over the more than 14 years the system has been in service. A lack of data governance (gap resolved pursuant to the consent decree) and strategic guidance on the use and maintenance of call types has resulted in an interrater reliability problem between call takers and across response resources. Fidelity to the call classification model cannot be assumed with a broad and overly diffused coding scheme. See recommendation for call type cleanup, below.

crime), or an alternative response (e.g., dead animal disposal, down powerlines) the response tier was manually recoded (see Figure 1, below).

RECOMMENDATION: Throughout this process, the scale of call type classifications has been noted as unreasonably detailed and not an effective means of call classification. SPD is working with CSCC to reduce the scale and sometimes redundant nature of these call types.

Call Types:

Why not isolate those call types, by description, which do not require a police response? Put simply, managing alternative or co-response is a function of risk mitigation. As outlined in the tiered response model proposed by NICJR, while there may be significant opportunity to provide the right resource for a person in crisis, the potential for harm to the responder or others must be mitigated.

The call type is insufficient to represent the total risk of the event, as evidenced by the limitations of the current call classification scheme, the discretionary and often one-to-many relationships that can occur with call outcomes, and the nearly 41,000 permutations of calls observed across initial call type, final call type, call clearance and how it was received. To leverage a more reliable data source, a label must be applied from a dimensionally scaled view of the call type (*i.e.*, call response tier). Phase Two will leverage this label to forecast risk from the words spoken by the person requesting assistance. While the final call type, in this analysis, represents critical context, it is not the complete analysis.

Compounding Disparity:

The academic community is rightly concerned about the use of police data in the development of advanced analytics and the extent to which inequalities present in the criminal justice system generally may be perpetuated in analyses generated from criminal justice data. The use of data to direct future delivery of police service thus comes with very real risk of compounding disparate effects by inappropriately focusing police resources on a continuous feedback loop. RMD mitigates this risk by relying in part on outcome measures independent of the delivery of police service (*i.e.*, SFD Aid Runs). Similarly, while death or injury are objective and independently verifiable outcomes, sometimes a police response can result in one of these outcomes. For this reason, all CAD events including use of force are eliminated from the count of adverse events. As such, the calculated "likelihood" of an adverse event (severity levels 2-5) is decoupled from the biasing effect of the police response.

It must be acknowledged that this analysis can only represent what has happened. When the intention is to radically disrupt the emergency response ecosystem, a direct measure of the risk of physical harm cannot be achieved. Instead, the outcomes utilized by this analysis are proxies for dangerousness. This initial estimate is assumed to be imperfect. As RMD is implemented and begins to inform the deployment of co/alternate response resources, the resulting outcomes will be tracked as a measure of system efficacy, in keeping with the "triple – T's" of Evidence-Based Policing (EBP).

Staffing:

Phase One of the RMD analysis suggests (see Figure 2, next page) 182 call types (approximately 51% of call types, or 73.16% of service time) are appropriately classified as a Tier 1 police response. That is, even though the report of a crime may not accompany this response, a significant risk to the people involved was identified.

The 38 call types (10.7%) identified for Tier 2 co-response represent an opportunity to provide a more tailored resource (*e.g.*, Mental Health Professional, see <u>Blueprint</u>), within a risk-mitigated response (*i.e.*, where an officer is available to immediately intervene, if necessary, to prevent physical harm to the co-responder). The RMD analysis suggests approximately 31 FTE¹⁸ are necessary to build capacity for this type of response. However, while Mental Health Professionals are the obvious resource, several professional disciplines may be viable in this role.

Under the Tier 2 response, a police officer would be primarily responsible for the contact, with the coresponder available in a support role as necessary or until any potential threat to responders or bystanders is resolved. At this point, every Tier 2 response could revert to a Tier 3, where the coresponder takes the lead. There is some overlap in response between Tier 2 and Tier 3. Phase One analysis indicates the need for approximately 8 FTE in this role. In addition to low-risk crisis contacts, Tier 3 responses include 49 call types (13.8% of responses), including low level calls for assistance, mediation of disputes, and initial investigation of noise complaints.

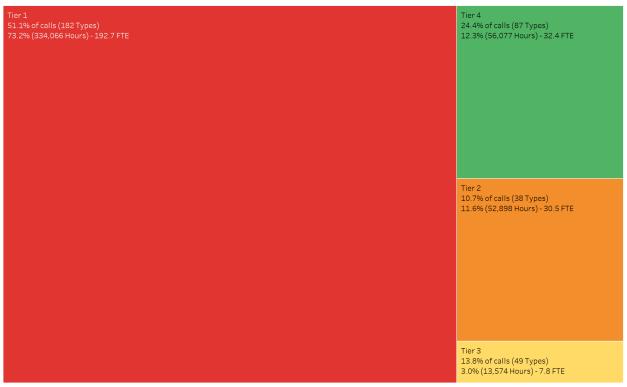


Figure 2 - RMD Staffing Analysis

Tier 4 is an opportunity for the City to improve customer satisfaction and realize some resource efficiencies. Represented in the 87 call types (24%) are crime reports necessary to file insurance claims and less well-defined requests for service. Some of these calls are for "hazards" or "traffic control", roles that can be safely filled by civilian responders. A combination of deferred response, online reporting, and alternate responders (*e.g.*, animal control) can fill this need.

8

¹⁸ This calculation is a rough estimate of the FTE needed to address the workload (in hours). The calculation assumes 2,080-hours +20% per FTE (for modest shift relief) and would need to be adjusted for 24/7 scheduling. For reference, the shift relief factor for sworn ranges from 1.7-2.1 under the current 4-2 shift schedule. Shift relief factors vary widely based on the actual shift schedule of the deployable resource.

¹⁹ The tiered response model proposed by RMD is identical to NICJR, except for coding. RMD *reverse codes* the response tiers to reflect current practice in call prioritization. Under RMD, a Tier 1 response represents the highest level of risk. A Tier 4 response represents almost no risk.

Operationalization:

As indicated previously, Phase Two (in progress) seeks to forecast the risk of a response. This information will be presented to call takers as they are listening to the request for service. Common in modern call center operation is on-the-fly NLP. This technology listens to the call and suggests insights to the call taker (customer service representative) to provide a more efficient and ultimately more satisfying experience for the caller.

From the call tiers defined by this analysis, preliminarily, bag-of-words models will be generated to train the intelligent call center models. Using a combination of cloud computing and web-based applications, this technology will inform CSCC as to the safety and appropriateness of an alternative response. The SPD is working to mature this technology, in collaboration with CSCC and Amazon Web Services. All technology will comply with relevant security and privacy best practices, as well as the City-specific requirements associated with the City's Privacy Policy and Surveillance Ordinance.

This effort is timed to coincide with response capacity coming online. Until capacity can be built, the SPD and CSCC will continue to mature the technology to become more accurate. The RMD project, as indicated in footnotes above, is designed to evolve with the City. As we more accurately represent the risks and benefits to responders and our community, the system will adapt to reflect those realities. Further, RMD assures the City of Seattle continues to set the standard for the future of police and emergency first response, nationally.

A Differential Police Response:

The overdiversification of police response has been contemplated since the 1960's. Experimentation with a Differential Police Response (DPR) began in the late 1970's but stumbled on the issue of call triage. RMD identifies opportunities to realize a DPR (Tier 2, 3 and 4). Co-response or an altogether alternative to police responders in these instances may have service or efficiency benefits. Within these strata, the City can deploy a resource capable of bringing a trauma informed response or a professional with a tailored specialty suited to the specific service being requested.

In a <u>2021 publication</u> resulting from research supported by the SPD, researchers at John Jay College of Criminal Justice found, among other things, the availability of services to be predictive of a decision to arrest (community caretaking) a person in crisis. Absent a service to refer a subject or a Mental Health Professional (MHP) capable of providing the standard of care, police are often without an alternative to emergent detention. Similarly, in service to members of our community in critical need of housing or other services may be rendered by a person credentialed with a Master's in Social Work (MSW) or an outreach professional with lived experience.

In addition to providing a tailored service, RMD enables an efficient response that is both more satisfying to the community member requesting assistance (customer) and makes the best use of limited police resources. Completed crimes reported for the purpose of filing an insurance claim, for example, can be routed to the proposed *portal*—a modern, online reporting platform. Requests to retrieve found property can be routed to Community Service Officer's (CSO's), without compromising the safety of those involved.

Next Steps:

This technical brief is provided in the spirit of collaborative development. The SPD recognizes emergency response and more general requests for service from our community as a City responsibility. Within the areas of risk and police service, the SPD is uniquely suited to answer some questions. Some questions are better answered by stakeholders and members of our community, with their own unique perspective and values.

As we work to incorporate feedback and learn more about these data, the risk matrix and tiered response design will change. The insights presented here should be taken as preliminary estimates. In the coming weeks, the SPD intends to provide a dashboard that can be engaged by stakeholders to interact with the matrix, alter some of the design parameters, and re-evaluate the model.

EXHIBIT E



Seattle Police Department Fall 2022



In May 2021, Chief Diaz announced SPD is facing a "staffing crisis" with the number of deployable officers at record lows.

How can we prioritize community engagement when we struggle to respond to all service requests in a meaningful way?

Currently SPD & CSCC face challenges in providing the expected level of service to the City of Seattle community members in need of non-emergency support.

Non-Emergency Line Staffing

- SPD no longer operates
 Non- Emergency line
- Frequently goes unanswered due to staffing issues
- Optics reflect negatively on SPD
- Community members do not get help

Availability for In-Person Response

- Ensure availability of officers to responded to highest priority incidents
- Move low priority, low risk calls away from an in person or sworn response

Poor online reporting interface

- Current incident logging interfaces is "clunky" and experience is unpleasant
- No direct integration to Mark43

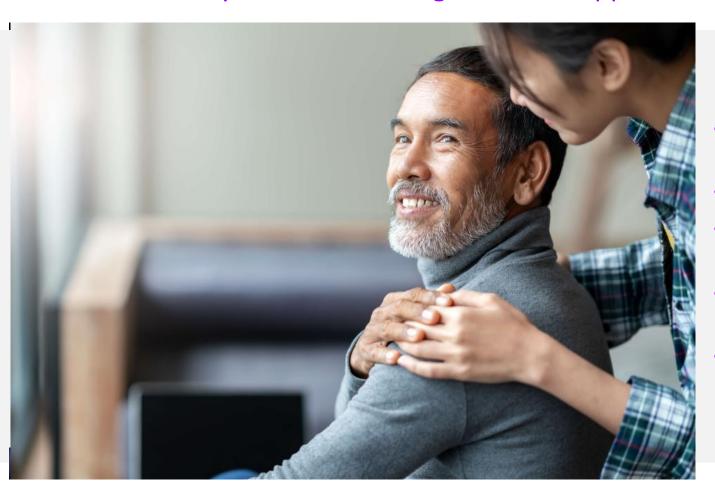
Limited accessibility support

- Limited support for individuals who cannot access technology due to lack of access or disability
- No ability to "get help" when logging an incident either by chat or phone
- Language or translation

Proposed Solution



A hybrid, multi-channel response which leverages intelligent telephony & upgraded web reporting, to ensure community members never go without support.



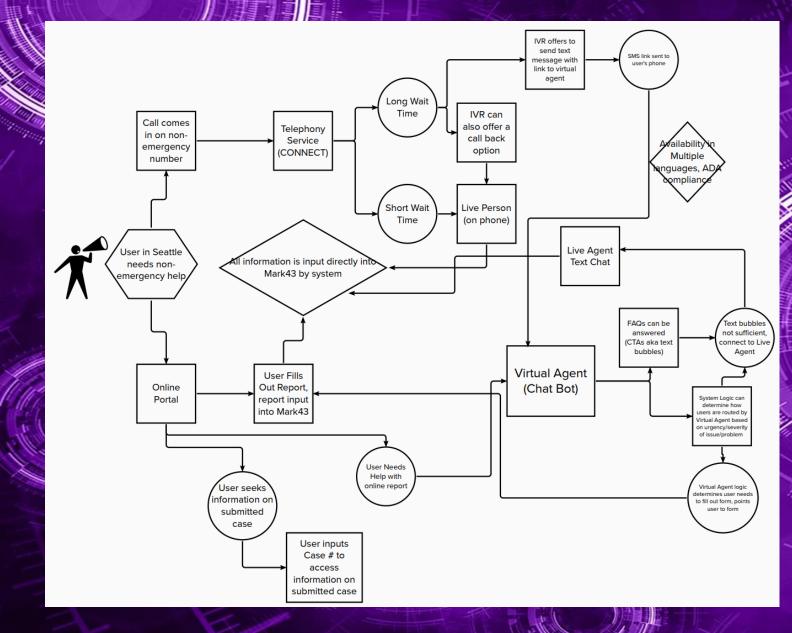
Focused on Helping Community Members:

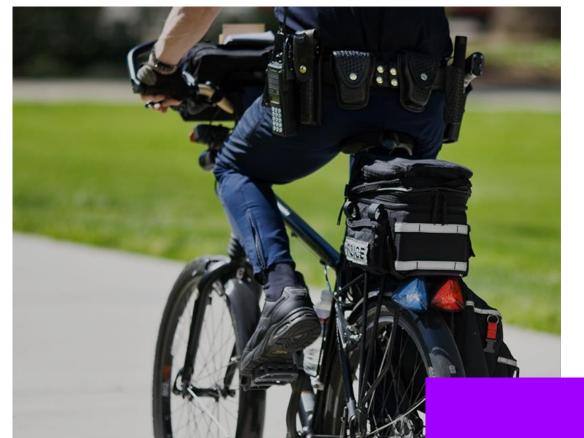
- Calls to non-emergency can be forwarded to a call center when 911 priorities limit availability
- Callers can choose to receive a "call back option"
- Web users can enter their incidents in a more robust dynamic webform
- Al supported "chat bot" to provide assistance or connect to a live agent
- Accessibility considered throughout the response, ADA compliant in multiple languages



Clearing the line, for real emergencies; without compromising service

CSCC handles more than 900,000 calls per year. 80% of 911 calls were for non-criminal events.





Our Approach

A three phased approach, designed to ensure the needs of SPD, CSCC and City Stakeholders are met, while keeping the community at the center

Discover

Assess the current nonemergency response to identify improvements

Design

Collaborate with SPD & CSCC to shape the future multi-channel response

Enable

Execute the plan, leveraging existing city investments and technologies (AWS)



Next Steps

- Meeting between CSCC & SPD to review workflow and validate requirements
- Accenture to draft proposal based on requirements
- 3. Discuss contracting vehicles



EXHIBIT F



NYU School of Law
40 Washington Square South
New York, NY 10012
info@policingproject.org

info@policingproject.org @policingproject 212,992,6950

Pilot Site Introduction

The Policing Project at the New York University School of Law, in partnership with Microsoft, and with funding from the Joyce Foundation and Microsoft's Racial Justice Initiative, is building Health Check - a comprehensive tool to define and measure the characteristics of a fair, effective, and just policing agency. This assessment of approximately 100 metrics explores public safety services, just policing, accountability and organizational efficacy. Agencies respond to each metric with a simple yes/no and provide evidence (e.g., policies, training manuals) to support their responses. Insights provided through this tool will help municipal leaders, police departments, and the communities they serve understand agency performance and collaboratively identify challenges and opportunities.

The Policing Project is currently working with jurisdictions who have volunteered to serve as pilot sites for the implementation of the tool. Pilot implementation includes the support of a social science researcher, Dr. Aili Malm, who assists the agency in completing the tool and using insights to inform improvements in policies and practices. This will both ease the burden of administration and lend neutral credibility to agency responses. Pilot implementation consists of five phases and should take approximately four months to complete.

I. Introductory Meeting

During the initial pilot meeting, representatives from The Policing Project will visit the site and present the tool. This day includes two meetings. The first should be attended by the Chief, the primary implementation contact, head of data analytics, officer(s) in charge of training and recruitment, and officer(s) in charge of community engagement. The second meeting should be attended by as many members of the command staff as possible. The tool is quite broad, and it is likely that most members of command staff will be involved in identifying at least one piece of evidence related to a metric in their purview. Each meeting will last approximately one hour. At the end of the day, the pilot site will be left with the Health Check tool and provided instructions for evidence collection.

II. Evidence Collection

During this phase, the pilot site will gather evidence for each metric of Health Check. Dr. Malm will assist the site with question interpretation and assessing evidence quality. Once the site has completed evidence collection for the first pillar, they will send all of the evidence to Dr. Malm for review and evaluation. The site will then begin working on subsequent pillars. This phase should take approximately one month to six weeks to complete.

III. Initial Evaluation

During the initial evaluation phase, Dr. Malm will assess the evidence provided by the site. The evidence will also be reviewed by the NYU team as part of the pilot process. This phase should take approximately one month to complete.

IV. Initial Site Review

Once Dr. Malm has completed the initial assessment of evidence, she will provide the site with a first draft of their completed Health Check assessment. She will visit the site and once again meet the Chief and command staff to present and discuss the initial scores. The site will then review and provide any additional evidence they deem appropriate to respond to metrics where credit was not given. This phase should take approximately one month.

V. Final Evaluation

During the last phase, Dr. Malm will review any additional evidence provided and complete the final Health Check ratings. She will then deliver a final report and completed Health Check to the site. This final phase should take approximately one month.

Summary

The NYU Policing Project team is incredibly grateful for your participation in this essential stage of the Health Check project. The Policing Project will not publish any results from pilot sites as the tool is still undergoing changes, but each pilot site is free to publish/disseminate the results as they see fit. Please contact us with any questions or concerns you have about the pilot process.

EXHIBIT G

Policymakers are often forced to make critical decisions about the safety, liberties, and tax dollars of their constituents using limited or stale criminal justice data. In the face of significant challenges and fiscal pressures, our leaders need up-to-date information from across the justice system, presented in a way that is easy to understand and utilize.

Justice Counts is an initiative led by the U.S. Department of Justice's Office of Justice Programs' Bureau of Justice Assistance (BJA), The Council of State Governments Justice Center, and a first-of-its-kind national coalition of 21 partners to develop and help implement consensusdriven metrics for criminal justice agencies to provide policymakers with more accurate, accessible, and actionable data.

The Justice Counts metrics were developed in partnership with a wide range of experts across the criminal justice system, representing officials at every corner of our nation's state, county, and municipal justice systems. More than 100 people, agencies, and entities worked to balance a complex range of issues to select the Justice Counts metrics through seven subcommittees specializing in each criminal justice sector. These metrics were then shared to and advanced by the Justice Counts steering committee, made up of active state and local officials-from law enforcement, to corrections, to legislatures, and beyond.

The Justice Counts metrics are designed to be both usable for policymakers and feasible for the agencies providing data. Justice Counts provides an opportunity for states and agencies to join a national movement for better criminal justice data. Participating states and agencies gain access to a suite of tools and resources to better understand, implement. and utilize the metrics: a national digital infrastructure to simplify and consolidate data entry; and automated data displays of trends across time and geography that refresh monthly.

There are opportunities for 10 states to become members of the Founding States Program and receive an exclusive, hands-on technical assistance package, including direct support to policymakers and agencies as well as early access to the digital infrastructure. Interested states must demonstrate a strong commitment to using data to present a timely, cross-system picture for policymakers and the public. Justice Counts will be most successful when state leaders work collaboratively and openly across municipal, county, and state criminal justice agencies that currently collect and house needed data.



Here are five ways states can demonstrate that they are ready to be a founding Justice Counts state.

1

Executive Order

Your state's governor can issue an order directing criminal justice agencies to participate in Justice Counts.

2.

Legislative Resolution

Your state's legislature can issue a resolution encouraging agencies to participate in Justice Counts.

3.

Letter of Request

Criminal justice leaders from across the system can come together to commit to Justice Counts and request technical assistance.

4.

Working Group Request

An existing cross-system body working on criminal justice data or policy issues can also issue a letter of request to be a Justice Counts state.

5.

Self-Assessment Participation

If 30 percent of a state's criminal justice agencies demonstrate interest through the self-assessment, the state can be accepted as a Justice Counts state.

The self-assessment and templates for each of the above can be found on https://justicecounts.csgjusticecenter.org/become-a-justice-counts-state/.

There are also limited opportunities to apply to an Implementation Grant program to receive BJA-funded training and technical assistance.

You can learn more about the Justice Counts metrics, find tools and resources, and sign up for work sessions or legislative briefings by visiting justice-counts.org or contacting justicecounts@csg.org.

Visit justice-counts.org to learn more.

Justice Counts Partners

American Jail Association

American Probation and Parole Association

The Council of State Governments
Justice Center

Correctional Leaders Association

CNA

International Association of Chiefs of Police

Justice Management Institute

Measures for Justice

National Association of Counties Research Foundation

National Association of State Budget Officers

National Association of State Mental Health Program Directors NRI

National Criminal Justice Association

National Center for State Courts

National Conference of State Legislatures

National District Attorneys Association

National Governors Association

National Legal Aid & Defender Association

National Sheriffs' Association

RAND Corporation

Recidiviz

University of Cincinnati Corrections Institute

U.S. Department of Justice's Office of Justice Programs' Bureau of Justice Assistance

This project was supported by Grant No. 2019-ZB-BX-K005 awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.